

Appendix 1

Stand Development Stages

The following table provides a summary of the DNR 2004 stand development stages. These are based on Carey et al. (1996) and Carey and Curtis (1996).

Stand Development Stage	Description
Ecosystem Initiation	Establishment of a new forest ecosystem following death or removal of overstory trees by wildfire, windstorm, insects, disease, or timber harvesting. Varying rates of retention of biological legacies (e.g., understory trees, large snags and down wood, soil microbes and invertebrates, fungi and non-vascular plants, etc.) influence the rate at which the stand develops into a Fully Functional forest in the future.
Sapling Exclusion	Trees fully occupy the site (canopy cover exceeds 70 percent) and start to compete with one another for light, water, nutrients, and space. Most other vegetation is precluded and many trees become suppressed and die.
Pole Exclusion	The high density and uniform size of relatively short trees creates dark understory conditions and low levels of biological diversity. Suppression mortality of smaller trees leads to the creation of small snags.
Large Tree Exclusion	Continued suppression mortality reduces tree density and creates small openings where scattered pockets of ground vegetation become established. Small snags created during the Pole Exclusion Stage fall, creating small down logs.
Understory Development	Understory of herbs, ferns, shrubs, and trees develops after death or removal of some dominant trees; time has been insufficient for full diversification of the plant community.
Botanical Diversity	Organization and structure of the living plant community becomes complex with time, but lack of coarse woody debris and other biological legacies precludes a full, complex biotic community.
Niche Diversification	The biotic community becomes complex as coarse woody debris, cavity trees, litter, soil organic matter, and biological diversity increase; diverse trophic pathways develop; wildlife foraging needs are met.
Fully Functional	Additional development provides habitat elements of large size and interactions that provide for the life requirements of diverse vertebrates, invertebrates, fungi, and plants.

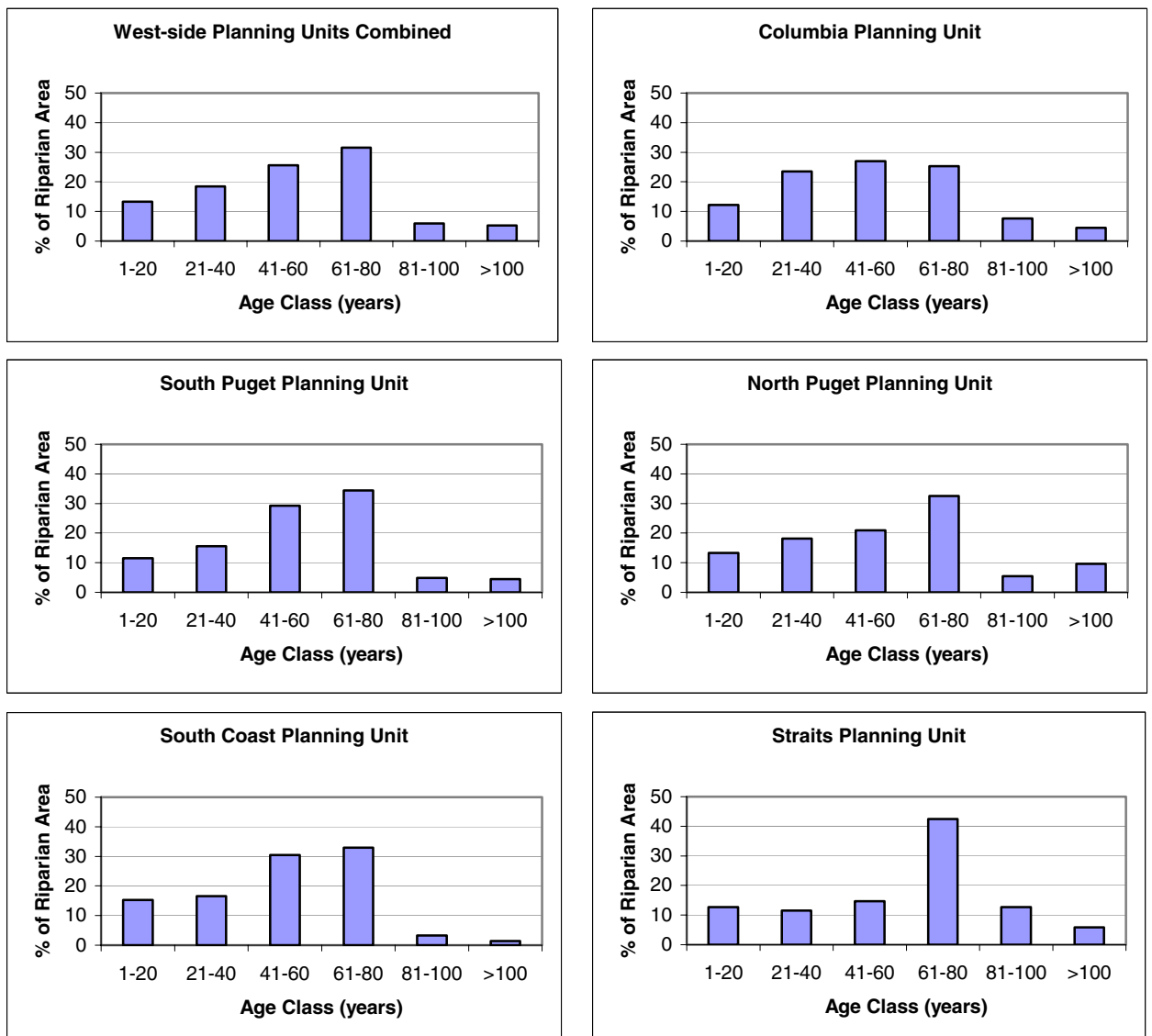
The stand development stages used in this document are adapted from DNR (2004), which is based on Carey et al. (1996). DNR's classification system summarizes forest stand structures using three major categories with eight more detailed stand development stages. The following chart illustrates the stand development stages.

	Summarized Stand Development Stage	Stand Development Stage
Less Complex Forest	Ecosystem Initiation	Ecosystem Initiation
		Sapling Exclusion
		Pole Exclusion
		Large Tree Exclusion
		Understory Reinitiation
More Complex Forest	Structurally Complex	Botanical Diversity
		Niche Diversification
		Fully Functional/ Old Natural Forests

Appendix 2

Riparian Management Zone Age Class Distributions

Approximate age distribution of riparian forests on DNR-managed forestlands in the five Westside HCP planning units are described below. Forest ages are actually for upland stands adjacent to riparian areas. However, because forest practices rules did not require Riparian Management Zones (RMZs) on streams before 1987, riparian forests are approximately the same age as the upland forests, wherever stands are more than about 12 years old. For stands between 0 and 20 years, about half have narrow RMZs containing older trees. Data are for forests along Type 1, 2, 3, and 4 streams.



Water Typing System for Forested State Trust HCP Lands

**(Washington Forest Practices Board Emergency Rules, November 1996
Washington State Register, Issue November 1996)**

(1) **“Type 1 Water”** means all waters, within their ordinary high-water mark, as inventoried as “shorelines of the state” under chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW, but not including those waters’ associated wetlands as defined in Chapter 90.58 RCW.

(2) **“Type 2 Water”** shall mean segments of natural waters, which are not classified as Type 1 Water and have a high fish, wildlife, or human use. These are segments of natural waters and periodically inundated areas of their associated wetlands, which:

- (a) Are diverted for domestic use by more than 100 residential or camping units or by a public accommodation facility licensed to serve more than 100 persons, where such diversion is determined by the Department to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type 2 Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;
- (b) Are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type 2 Water upstream from the point of diversion for 1,500 feet including tributaries if highly significant for protection of downstream water quality. The Department may allow additional harvest beyond the requirements of Type 2 Water designation provided the Department determines after a landowner-requested on-site assessment by the Department of Fish and Wildlife, Department of Ecology, the affected Tribes and the interested parties that:
 - (i) The management practices proposed by the landowner will adequately protect water quality for the fish hatchery; and
 - (ii) Such additional harvest meets the requirements of the water type designation that would apply in the absence of the hatchery;
- (c) Are within a federal, state, local, or private campground having more than 30 camping units: *Provided*, that the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within 100 feet of a camping unit, trail or other park improvement;
- (d) Are used by substantial numbers of anadromous or resident game fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have highly significant fish populations:
 - (i) Stream segments having a defined channel 20 feet or greater in width between the ordinary high-water marks and having a gradient of less than 4 percent.

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- (ii) Lakes, ponds, or impoundments having a surface area of 1 acre or greater at seasonal low water.
 - (e) Are used by salmonids for off-channel habitat. These areas are critical to the maintenance of optimum survival of juvenile salmonids. This habitat shall be identified based on the following criteria:
 - (i) The site must be connected to a stream bearing salmonids and accessible during some period of the year; and
 - (ii) The off-channel water must be accessible to juvenile salmonids through a drainage with less than a 5 percent gradient.



A canopy gap caused by root disease next to this Type 3 (potentially fish-bearing) stream has allowed the understory shrub layer to reestablish.

- (3) **“Type 3 Water”** shall mean segments of natural waters, which are not classified as Type 1 or 2 Water and have a moderate to slight fish, wildlife, and human use. These are segments of natural waters and periodically inundated areas of their associated wetlands which:
 - (a) Are diverted for domestic use by more than 10 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, which such diversion is determined by the Department to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type 3 Water upstream from the point of diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;
 - (b) Are used by significant numbers of anadromous or resident game fish for spawning, rearing or migration. Guidelines for determining fish use are described in the *Forest Practices Board Manual*. If fish use has not been determined:
- (i) Waters having the following characteristics are presumed to have significant anadromous or resident game fish use:
 - (A) Stream segments having a defined channel of 2 feet or greater in width between the ordinary high-water marks in Western Washington and having a gradient 16 percent or less;
 - (B) Stream segments having a defined channel of 2 feet or greater in width between the ordinary high-water marks in Western Washington and having a gradient greater than 16 percent and less than or equal to 20 percent, and having greater than 50 acres in contributing basin size in Western Washington;
- (ii) The Department shall waive or modify the characteristics in (i) above where:
 - (A) Waters are confirmed, long term, naturally occurring water quality parameters incapable of supporting anadromous or resident game fish;

(B) Snowmelt streams have short flow cycles that do not support successful life history phases of anadromous or resident game fish. These streams typically have no flow in the winter months and discontinue flow by June 1; or

(C) Sufficient information about a geographic region is available to support a departure from the characteristics in (i), as determined in consultation with the Department of Fish and Wildlife, Department of Ecology, affected Tribes and interested parties.

(iii) Ponds or impoundments having a surface area of less than 1 acre at seasonal low water and having an outlet to an anadromous fish stream.

(iv) For resident game fish ponds or impoundments having a surface area greater than 0.5 acre at seasonal low water.

(c) Are highly significant for protection of downstream water quality. Tributaries which contribute greater than 20 percent of the flow to a Type 1 or 2 Water are presumed to be significant for 1,500 feet from their confluence with the Type 1 or 2 Water or until their drainage area is less than 50 percent of their drainage area at the point of confluence, whichever is less.

(4) **“Type 4 Water”** classification shall be applied to segments of natural waters which are not classified as Type 1, 2 or 3, and for the purpose of protecting water quality downstream are classified as Type 4 Water upstream until the channel width becomes less than 2 feet in width between the channel width becomes less than 2 feet in width between the ordinary high-water marks. Their significance lies in their influence on water quality downstream in Type 1, 2, and 3 Waters. These may be perennial or intermittent.






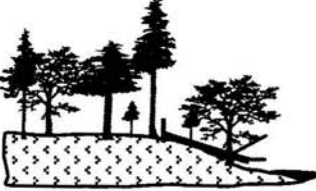


(5) **“Type 5 Water”** classification shall be applied to all natural waters not classified as Type 1, 2, 3 or 4; including streams with or without well-defined channels, areas of perennial or intermittent seepage, ponds, natural sinks and drainage ways having short periods of spring or storm runoff.



Type 5 non-fish-bearing streams.

Appendix 4

Riparian Management Scenarios Summary

Stand Condition	Restoration Objective and Priority	Desired Stand Development
<p>Conifer-Dominated Stands: Type II RMZ Thinning in Conjunction with Upland Thinning</p> 	<p>Accelerate individual tree growth, vigor, and stability. Promote species diversity with priority on retaining a component of shade tolerant tree species. Promote future heterogeneity in stand structure. Creation of dead down wood to enhance riparian habitat.</p> <p>Highest Priority</p>	
<p>Conifer-Dominated Stands: Type III RMZ Thinning in Conjunction with Upland Thinning</p> 	<p>Accelerate individual tree growth, vigor, and stability. Promote species diversity, protect existing structural components. Promote heterogeneity in stand structure. In particular snags, down wood, remnant trees, and advance regeneration will be protected. Creation of dead down wood and instream large down wood to enhance riparian habitat.</p> <p>Second Highest Priority</p>	
<p>Conifer-Dominated Stands: Type III RMZ Thinning in Conjunction with Upland Regeneration Harvest</p>	<p>Same as above with the addition of protecting the stand from excessive windthrow.</p> <p>Medium Priority</p>	
<p>Hardwood-Dominated Stands: Individual Conifer Release</p> 	<p>Release established conifers from hardwood competition. Protect any existing structures such as snags and DWD.</p> <p>Low Priority</p>	
<p>Hardwood-Dominated Stands: Conversion</p> 	<p>Create an older forest stand condition dominated by conifers by eliminating the current stand and establishing a mix of site-adapted conifer species.</p> <p>Low Priority</p>	

Modeled Riparian Management Scenarios

The Washington State Department of Natural Resources' stand development projections for conifer-dominated scenarios using potential silvicultural treatments were envisioned in the Riparian Forest Restoration Strategy. Modeled are the following two scenarios for a 70-year planning period (approximately the span of the HCP):

Type II RMZ thinning with upland thinning: Stands with a conifer basal area greater than 50 percent that are in the Pole Exclusion stand development stage or below; ages are generally below 40 years, the Quadric Mean Diameter (QMD) is less than 10, and relative density (RD) generally greater than 45.

Type III RMZ thinning with upland thinning: Stands with a conifer basal area greater than 50 percent that are in the Large Tree Exclusion or Understory Reinitiation stand development stage; ages are generally more than 40 years of age, the QMD is greater than 10, and relative density is variable. The scenarios in this example are designed to illustrate one version of the possible implementation of the strategy. Each activity is careful not to overstep the minimum relative density of trees per acre allowed within the negotiated range.

For each scenario, an example stand with the following species mixture was modeled: Douglas-fir-dominated stand containing 8 percent red alder, 40 percent western hemlock and 52 percent Douglas-fir.

Each scenario is modeled with three alternate paths during the 70-year time period of the HCP: no treatment, one, and two thinning treatments to various residual relative density levels. Starting age of the stand for the Type II treatment is 40 years (Scenario A), for the Type III treatment, 50 years (Scenario B).

The projections were modeled with the Forest Vegetation Simulator (FVS) West Cascades variant. For each stage in the 70-year stand development period, the following parameters are presented:

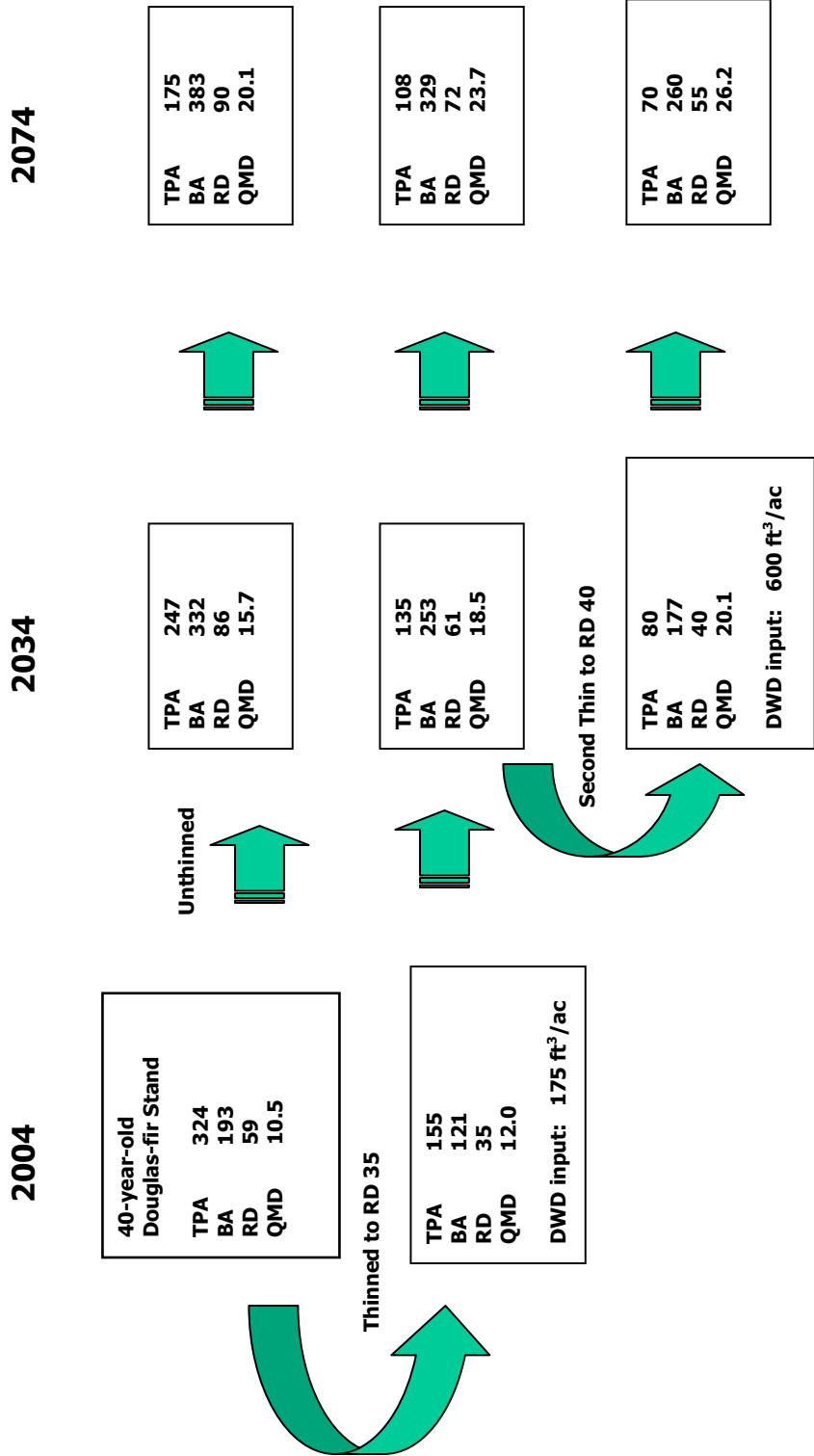
- TPA (Trees per acre)
- BA (Basal area per acre)
- RD (Relative density)
- DBH (Diameter at breast height 4.5 feet)
- QMD (Quadric mean diameter) of trees 4.5 inches DBH and larger
- DWD (Down woody debris) input in cubic feet per acre* since beginning of simulation
(5 trees per acre from the largest thinned DBH class per harvest entry into stand)

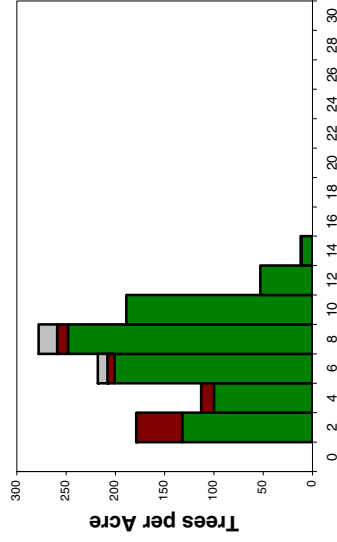
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- Conifer regeneration is naturally highly variable and is included in these simulations. The survivorship of the conifer regeneration is controlled by FVS.
 - For scenario “A” selected diameter distributions are shown to illustrate advancement toward the RDFC and long-term management objectives.

* Calculations based on “Cubic-foot volume table for second-growth Douglas-fir on Forest Survey Standard” in J.R. Dilworth. 1970. Log scaling and timber cruising. OSU, Corvallis, OR.

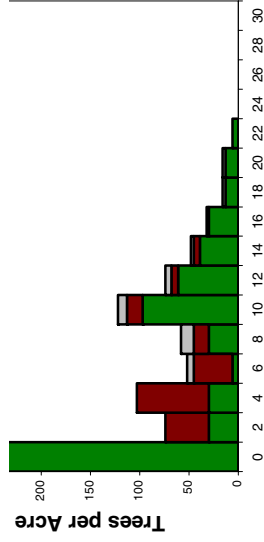
Appendix 5 continued

Management Scenario A. Type II RMZ thinning represented by a Douglas-fir stand 40 years of age

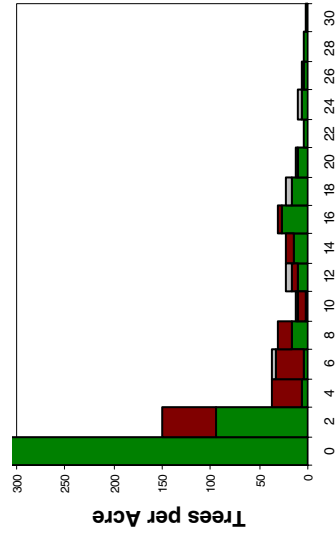




Diameter distribution for management scenario ‘A’ in 2004, shows the initial unthinned stand as ‘trees per acre by 2-inch diameter’ classes. The initial stand represents an unthinned stand in the Pole Exclusion development stage.



Diameter distribution for management scenario ‘A’ in 2034, 30 years after being thinned to Relative Density 35. Also using ‘trees per acre by 2-inch diameter’ classes, stand diameter distribution is starting to resemble that of the Riparian Desired Future Condition (Figure 3).

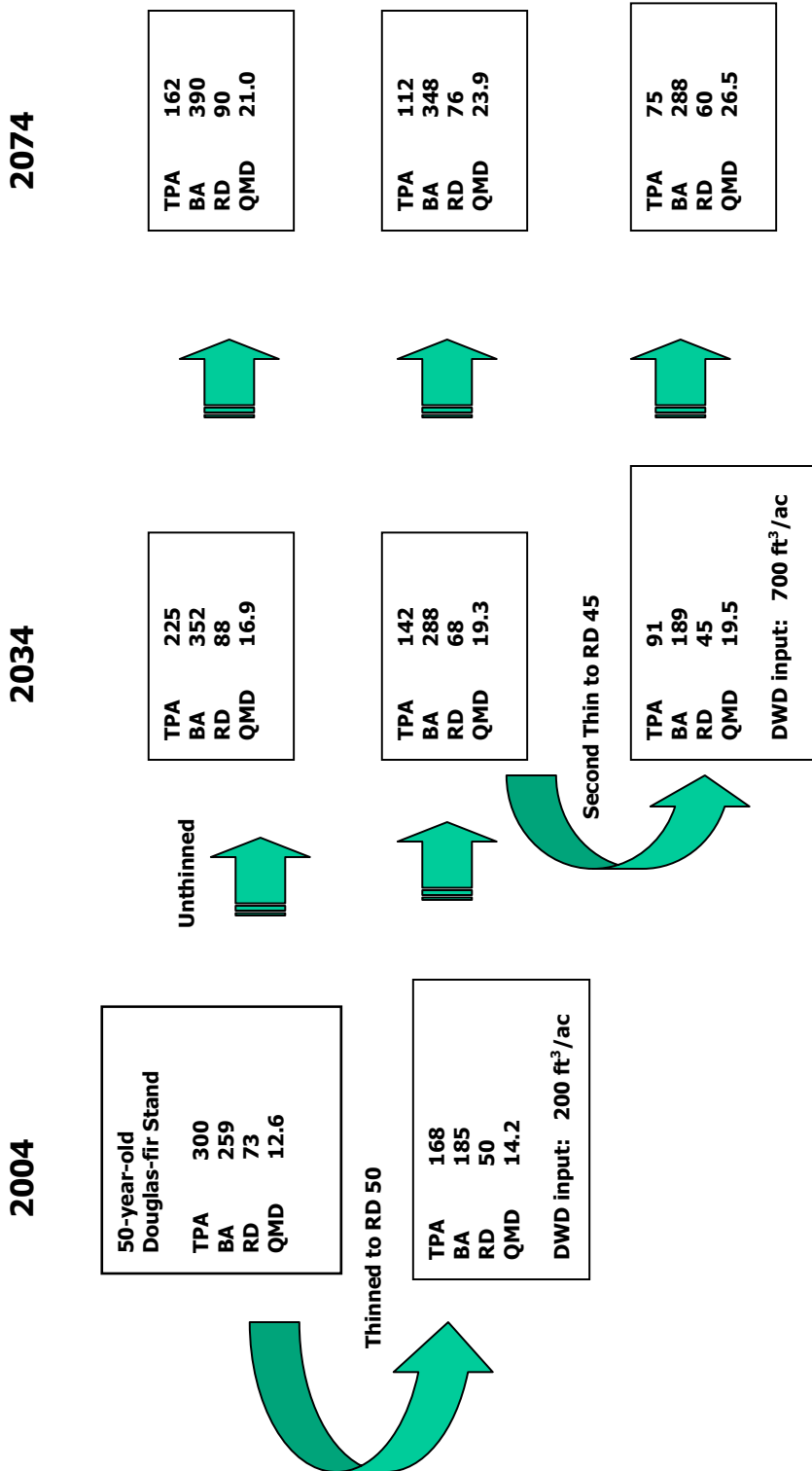


Diameter distribution of management scenario ‘A’ in 2074, 70 years after being thinned to RD 35 and 40 years, after a second thinning to RD 40. Stand diameter distribution is starting to resemble that of the long-term goal for riparian forests (Figure 3)



Appendix 5 continued

Management Scenario B. Type III RMZ thinning represented by an unmanaged Douglas-fir stand 50 years of age



Summary of Riparian Forest Restoration Strategy Commitments

Under the Washington State Department of Natural Resources' trust lands Habitat Conservation Plan (HCP), Riparian Management Zones (RMZ) are to be restored to create high quality aquatic habitat to aid federal salmon recovery efforts, and to contribute to the conservation of other aquatic and riparian obligate species. This goal will be achieved with a combination of active management through forest stand manipulation and the natural development of unmanaged forest stands. Over time, the strategy is designed to restore structurally complex forests providing all ecological functions that meet the conservation objectives.

Appendix 6 is a summary of the major commitments contained within the Implementation Procedures for the HCP Riparian Forest Restoration Strategy (RFRS). This summary may not discuss all the commitments of the strategy and is not meant to be a substitute for the full RFRS document. Please note that HCP commitments such as the determination and application of riparian buffers are not listed here.

- This Implementation Procedure for the Riparian Restoration Strategy replaces the 1999 Forestry Handbook procedure PR 14-004-150 and is to be implemented through training of region Riparian Resource Designees and field personnel. Training is to include the Federal Services, and implementation will take place in a phased approach. Full implementation will start in fiscal year 2007.
- The strategies outlined in this document apply to lands managed under the HCP west of the Cascade crest, with the exception of the Olympic Experimental State Forest (OESF). Strategies described in this document are required to be implemented in the field when forested Riparian Management Zone restoration is being considered, unless alternate plans are approved in writing by the HCP Implementation Management or their designees, in consultation with the appropriate DNR Region Manager or Region State Lands Assistant Manager.

DNR will implement all aspects of its riparian conservation strategy as well as other strategies that require stream typing using the Washington Forest Practices Board Emergency Rules, November 1996 (WAC 222-16-030). This stream typing system will now be officially referenced as the "Water Typing System for Forested State Trust HCP Lands."

- The restoration objective is the Riparian Desired Future Condition (RDFC). The RDFC will result in riparian forests that resemble the Developed Understory to Niche Diversification stages and have at minimum a basal area of 300 square feet and a quadratic mean diameter (QMD of trees 7 inches and greater DBH) of 21 inches.
- Before deciding on a specific riparian restoration approach, DNR staff will consider alternative silvicultural pathways, including a no treatment alternative, and will analyze the respective potential impacts to the Riparian Management Zone.

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- Management of riparian forest stands will only take place if management activities—within acceptable risk parameters—would decrease the amount of time required to meet stand-specific riparian objectives compared to the no treatment option.
 - Forest stands that already have met the Riparian Desired Future Condition quadratic mean diameter and basal area targets will not be eligible for restoration.
 - The middle and outer riparian zones are condensed into one zone for operational purposes.
 - Where necessary, the 25-foot inner riparian zone will be expanded on a site-specific basis to maintain post treatment shading of the stream and other environmental functions.
 - All management within Riparian Management Zones will be site-specific, i.e., tailored to the physical and biological conditions at a particular site.
 - During commercial restoration activities, a total of five (5) trees per acre of the RMZ will be dedicated toward dead wood goals (exception: one tree per acre if the harvest entry removes 15 trees per acre or less) before merchantable trees will be removed. Large existing snags (20" DBH, 16' height) or areas that are unusually rich in snags within riparian forests will be protected.
 - Conifer-dominated stands (conifer basal area >50 percent) will be restored using thinning and uneven-aged management techniques such as small canopy gaps. Canopy gaps will be used outside 100 feet of the 100-year flood plain and be 0.25 acres in size or smaller, where appropriate. Thinning will result in residual riparian forest relative densities greater than 30 (thinning below RD 35 to RD 30 will require HCP Implementation Manager approval in consultation with the Federal Services) or at least 100 trees per acre (75 trees per acre in stands of the Large Tree Exclusion or later forest stand development stages), whichever results in the greater number of residual trees. Thinning will be from below or across the diameter range, retaining the largest trees and the existing tree species diversity.
 - Type III thinnings will occur in stands less than 70 years of age. If appropriate, thinning activities may occur in stands greater than 70 years of age with written approval from the HCP Implementation Manager and in consultation with the Services. This approach to thinning older stands will be reviewed by the Riparian Forest Restoration Strategy Technical Review Committee at the end of the three-year Implementation Period.
 - Windthrow risk assessments will determine the need for wind buffers. Wind buffers will be treated the same as the middle and outer zone. In areas of moderate and high windthrow risk, post-thinning RD of the dominant and co-dominant canopy will be greater than 60 percent of the pre-thinning RD, and RD will be greater than 40, or at least 75 dominant and co-dominant trees per acre, whichever results in the greater number of residual trees.
 - Hardwood-dominated stands (hardwood basal area > 50 percent) will be restored using individual tree release (if more than 25 viable conifers per acre are present) or even-aged regeneration in the form of patch cuts. Patch cuts will be less than 2.5 acres in size and separated by 150-foot no-harvest buffers. No conifers will be cut during restoration of hardwood-dominated stands except for operational reasons. A natural resource specialist will be consulted to help draft a site-specific management plan, ensuring that restoration objectives will be met.
 - If more than two commercial management entries are planned for a riparian stand within the 70- to 100-year HCP planning period, prior approval by the HCP Implementation Manager in consultation with the Federal Services will be required.

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- For all commercial prescription categories, no restoration harvest activities will be allowed in the inner zone, until they are addressed through the adaptive management process.
 - Pre-commercial management activities and non-commercial restoration activities (creation of large woody debris, underplanting, release of suppressed conifers, and noxious weed control) may take place inside the inner zone to the edge of the 100-year flood plain.
 - Disturbance to the inner riparian zone during commercial activities will be restricted to road crossings and yarding access.
 - Roads will continue to be used and constructed within Riparian Management Zones for forest management and other activities. Trees felled within the RMZ inner zone (25 feet on either side of the stream) with respect to road construction, reconstruction or maintenance will be used for instream riparian enhancement, unless a biologist or engineer determines the site is unsuitable for wood placement. At each stream crossing, one (1) log from the largest cut conifer diameter class—and in length at least two times the width of the ordinary high-water mark of the stream—will be placed across the stream on the down-stream side of the crossing. Three (3) root wads, if present, will be placed additionally in or along the stream channel on the downstream side of the crossing. All other grubbed stumps from within the inner zone, when available, will be placed in a linear fashion at least 50 feet from the road in the middle or outer zone of the RMZ. All other timber within the right-of-way inside the RMZ may be removed. If instream habitat enhancement is not feasible, an alternate plan will be forwarded to the appropriate HCP Implementation Manager.
 - Full suspension yarding will be required in the inner zone of the Riparian Management Zone. Yarding corridors will be kept to a minimum in numbers and width.
 - Low ground pressure mobile equipment will be allowed for thinning in the RMZ. Terrain and timing restrictions will be imposed to minimize impacts. No ground equipment will be allowed within 25 feet of the inner zone (leaving a 50-foot zone of undisturbed ground vegetation along the stream) except for road construction. The quantity and width of skid trails will be kept to a minimum in numbers and width. Trees that will be removed will be directionally felled away from the inner zone when feasible. Wherever possible, ground-based equipment will ‘walk’ on a mat of logging slash to reduce soil compaction and rutting. Skid trails within the RMZ will be water barred.
 - During these operations, trees that are damaged in the middle and outer zone of the Riparian Management Zone will be allowed to remain on site as live trees, snags, or down woody debris, and can be counted toward the riparian enhancement targets. Trees that are cut or damaged in the inner zone of the RMZ will remain on site and cannot be counted toward the riparian enhancement targets.
 - For the purpose of blowdown salvage, a site-specific plan will be required. The plan shall contain a strategy on how to meet the Riparian Desired Forest Condition, including a specific reforestation plan and a plan addressing down woody debris levels. The site-specific restoration plan will be submitted to the HCP Implementation Manager for approval in consultation with the Federal Services.
 - Riparian associated wetlands (periodically inundated areas of Type 1, 2, and 3 Waters) will not be subject to thinning.
 - Non-timber activities will be managed in a way conducive to the HCP Riparian Forest Restoration Strategy goals and objectives. Written exemptions will be requested from the Federal Services for the following activities within the required RMZ of Type 1-4 streams:

campgrounds, trail heads, surface disturbance activities from oil and gas leases or mining leases, rock and gravel pits, utility easements, and special forest products leases.

- New information from DNR and other research and monitoring sources will play an important role in the future evolution of this strategy through the adaptive management process.
- Upon approval, this strategy will be subject to compliance and effectiveness monitoring, as are the other HCP strategies. Annual reporting to Federal Services will document implementation compliance monitoring of the riparian strategy.
- Adaptive management changes consistent with the restoration goal will be made to this Riparian Forest Restoration Strategy when implementation and/or effectiveness monitoring indicate that the objectives outlined in the RFRS are not being met. Changes can be made by the exchange of letters by the appropriate agency representatives.

Implementation Period Commitments

The following non-standard localized activities described below will apply during the Implementation Period of this strategy (until January 1, 2009), and will require joint concurrence between the DNR HCP Implementation Manager and the Federal Services (NOAA Fisheries and USFWS). After January 1, 2009, decisions will be made regarding further implementation of these activities and the future need for interagency approval processes.

If DNR determines this approach is needed, DNR will coordinate with the Federal Services on a joint concurrence letter between the three agencies. The Federal Services will have 60 working days to respond back to DNR, either with signing the concurrence letter, or notifying the Department otherwise.

Site-specific riparian activities that require joint concurrence between DNR and Federal Services:

1. Type II and Type III thinning to a RD 30.
2. Specific forest practice activities for salvage logging in riparian areas.
3. Conducting more than two commercial silvicultural restoration harvest treatments within the same portion of the riparian area during the 70- to 100-year term of the HCP.
4. Conducting a Type III thinning in stands greater than 70 years of age.
5. Specific non-timber resource activities (see non-timber section).

Changes to the stream typing methodology or the Implementation Procedures for the Riparian Forest Restoration Strategy will also require concurrence between the three agencies. However, the level of analysis and discussions between the agencies for these changes would be expected to be more comprehensive and systematic than addressing the site-specific issues addressed above. See Section 4 of this document for changes applied to the RFRS due to adaptive management.

Field Training and Implementation Schedule

The Implementation Procedures for the Riparian Forest Restoration Strategy will be carried out through the Washington State Department of Natural Resources' region-based specialists that can provide a readily accessible resource for the local managers, and serve as the nexus for ongoing consultation and updating of the field procedures. Training sessions will be conducted for field personnel designing forest management activities.

The training session is intended to provide field managers with a sound context for the evaluation and prioritization of restoration activities in riparian areas. Additionally, the training will provide guidance on the design and implementation of appropriate site-specific silvicultural prescriptions for the restoration of riparian management areas.

The training plan will be implemented through a number of planned activities identified as follows:

APPROXIMATE DATE	PLANNED ACTIVITY
August 2005	Riparian Forest Restoration Strategy approved by Federal Services
May 2005	Identify region Riparian Resource Designees ¹ for the implementation of the Riparian Forest Restoration Strategy
May 2005	Provide training to region Riparian Resource Designees. This will most likely comprise of a week long, in the field, training session. The cadre of instructors will include: <ul style="list-style-type: none">▪ DNR Silviculturists and Biologists▪ USFWS and NOAA Fisheries Scientists▪ USFWS Fisheries Biologist▪ DNR Division Training Designees
Fiscal Year 2006	Riparian Forest Restoration Strategy field trials Implement Monitoring and Adaptive Management
Fiscal Year 2007	Riparian Forest Restoration Strategy full implementation

¹Region Riparian Resource Designees will be those staff members in the regions who are experienced in the application of silvicultural prescriptions designed for a specific outcome or forest condition, i.e., region silviculturists, forest scientists, foresters with silviculture expertise, etc.



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